

REMARKS

Applicants respectfully request entry of the above amendments and reconsideration of the following arguments pursuant to 37 C.F.R. § 1.111.

1. Status of the Claims

Claims 1-4 and 6-16 stand pending. Claims 1-4 and 6-16 stand rejected. Claim 5 stands previously canceled.

Upon entry of the present amendments, Applicants canceled claim 16. Accordingly, no prohibited new matter is introduced by the amendments. The claim has been canceled without prejudice to, or disclaimer of, the canceled subject matter. Applicants reserve the right to file a continuation or divisional application on any subject matter canceled by way of amendment.

2. Information Disclosure Statement

Applicants appreciate the Office's acknowledgement of the Information Disclosure Statement filed June 23, 2009. Applicants submit herewith another Information Disclosure Statement, acknowledgement of which is respectfully requested with the Office's next communication.

3. Acknowledgement of Withdrawn Rejections

Applicants acknowledge that the Office withdraws the following rejections:

- 1) the rejection of claims 1-4 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,389,394 ("Weyersbach") as further evidenced by Minifie, "Chocolate, Cocoa and Confectionery," 2nd Ed., AVI Publishing Co., Inc., Westport CT, P. 69 (1980) ("Minifie") and in view of U.S. Patent No. 2,957,769 ("Rusoff") and U.S. Patent Nos. 4,758,444 or 4,871,562 ("Terauchi I or II" respectively);
- 2) the rejection of claims 1, 5, 8, and 11-16 under 35 U.S.C. § 103(a) over Terauchi I or II alone or, if necessary, as further evidenced by Minifie; and
- 3) The rejection of claims 7 and 9-10 under 35 U.S.C. § 112, second paragraph.

The Office states, "[t]he rejection of the claims over Weyersbach in view of Rusoff and Terauchi

and Terauchi as further evidenced by Minifie have [sic] been dropped in response to applicants amendments to the claims.” Office Action, bottom section on page 3. Presumably, the Office withdraws both obviousness rejections of (1) claims 1-4 and (2) claims 1, 5, 8, and 11-16 as discussed *supra*. For the clarity of the record, the Office is respectfully requested to clarify this issue with the next communication.

4. Claim Rejections under 35 U.S.C. § 103(a)

The Office newly rejects claims 1-4 and 6-16 under 35 U.S.C. § 103(a) as allegedly unpatentable over **Kanebo Ltd**, JP 06-292544 (“Kanebo”) in view of Rusoff.¹

Kanebo allegedly discloses a method preparing a beverage containing fat/oil. Office Action, page 2. The method allegedly includes the steps of (1) mixing an extracted solution of cacao beans with water and an emulsifying agent; (2) heating the mixture to less than 85°C; (3) homogenizing the mixture to create a stable beverage solution; and (4) filling the homogenized solution into an airtight container. *Id.* The Office admits that Kanebo differs from the claimed methods for not using a centrifuge. *Id.* Rusoff allegedly teaches (1) extracting cocoa beans with hot water, and (2) filtering the extract to remove fine particles. *Id.* Rusoff allegedly describes the use of a centrifuge to filter the cocoa extract. *Id.*, at 2-3. The Office apparently applies Rusoff to cure the defect of Kanebo, alleging that it would have been obvious for a skilled artisan to use the extraction method of Rusoff to centrifuge the extract of Kanebo to create a cacao extract containing smaller particles. *Id.*, at 3.

The Office admits that the cited references fail to teach (1) the temperature of centrifugation, (2) the fat content of the beverage, and (3) the addition of milk or milk-derived ingredient to the extract. *Id.* The Office, however, asserts that a skilled artisan is expected to adjust the temperature and the fat content, while the addition of milk to a cacao drink is known in the art. *Id.*

¹ The Office rejects claims 1-4 and 6-16 “as being unpatentable over Kanebo (JP 06-292544) in view of Weyersbach (5,389,394).” Office Action, second full paragraph on page 2. The Office, however, refers to Rusoff in the following paragraph. Furthermore, the cited sections correspond to those of Rusoff, but not Weyersbach. For the clarity of the record, the Office is respectfully request to clarify this issue with the next communication.

Applicants traverse the rejection. A finding of obviousness under 35 U.S.C. § 103 requires that both the suggestion of the claimed invention and the expectation of success must be in the prior art, not in the disclosure of the claimed invention. *In re Dow Chem. Co.*, 837 F.2d 469, 5 U.S.P.Q.2d 1529 (Fed. Cir. 1988). Additionally, “obviousness requires a suggestion of *all* limitations in a claim.” *CFMT, Inc. v. Yieldup Int’l Corp.*, 349 F.3d 1333, 1342, 68 U.S.P.Q.2d 1940, 1947 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985, 180 U.S.P.Q. 580, 583 (C.C.P.A. 1974) (emphasis added). Furthermore, one common inquiry in the above tests of obviousness is whether a skilled artisan would have had reasonable expectation of success to practice the claimed invention. *Examination Guidelines for Determining Obviousness under 35 U.S.C. 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc.*, 72 Fed. Reg. 57,528.

The Office has failed to adduce *prima facie* obviousness. Each of independent claims 1 and 15 recites, *inter alia*, (1) removing insoluble solids from a hot water extract of cacao nibs (2) through a two-phase (solid-liquid) separation with a disk centrifuge (3) to obtain a fat/oil-rich extract. The Office admits that Kanebo, the primary reference, fails to teach using a centrifuge to remove insoluble solids. Kanebo actually teaches using *a paper filter* to remove insoluble solids from a cacao nib extract. See partial translation of Kanebo (enclosed as Appendix I). The Office relies upon Rusoff as the secondary reference to cure the defect of Kanebo. However, Rusoff merely mentions “centrifuge” or “centrifugation” *once* in the entire document:

Moreover, the other methods of extraction employed required a filtration step. Such filtration may be effected by any conventional means such as a plate and frame filter, a filter wheel and, of course a *centrifuge* may be employed if desired.

Rusoff, col. 4, lines 65-70 (emphasis added). Rusoff does not teach or suggest treating the extract with “a disk centrifuge for two-phase (solid-liquid) separation,” which is presently recited. Accordingly, Rusoff fails to cure the defect of Kanebo. Kanebo and Rusoff, alone or viewed in combination, fail to teach at least the above claim element. Without all claims elements being taught, there can be no expectation of success in preparing a cacao fat/oil-rich chocolate drink with the claimed methods.

Additionally, the Office fails to provide any rationale why a skilled artisan would have chosen a specific type of centrifuge—a disk centrifuge for two-phase (solid-liquid) separation—among various centrifugation methods available. There is no motivation to combine the elements as asserted by the Office in a manner that would have reasonably provided an expectation of success.

Further, the Office is reminded that a prior art reference must be considered as a *whole*, including portions that would lead away from the claimed invention. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Rusoff actually teaches (1) removal of fat/oil from an extract, and (2) water as the preferred extracting solvent to avoid extraction of fact. *See e.g.*, Rusoff, col. 2, line 72 to col. 3 line 3; col. 3, lines 55-56. Particularly, Rusoff states, “*Removal of fat* insures complete solubility for the flavor extract.” *See* Rusoff, col. 3, lines 9-10 (emphasis added). On the other hand, Kanebo teaches a method preparing a homogenized beverage with fat/oil. *See* Kanebo, Abstract. The present application discloses a method producing a fat/oil-rich extract. When viewed as whole, Rusoff actually teaches away from the presently claimed methods. Thus, a skilled artisan would not have combined Rusoff with Kanebo, because the references teach methods with opposite goals.

Applicants further point out that the claimed methods yield unexpected results over cited art. Kanebo teaches using *a paper filter* to remove insoluble solids from a cacao nib extract. *See* Appendix I. Accordingly, Kanebo’s removal process and the resulting extract differ significantly from the claimed methods. First, paper filters generally are not recommended in large-scale industrial processes, because they are not strong enough to withstand the relatively high flow rates, *e.g.*, about 10 ton/hr, which are commonly required in an industrial application. If Kanebo’s method is employed in large-scale processes, paper filters will be prone to get damaged, and need to be frequently replaced. Second, paper filters generally have a great variation in the pore size. The presence of larger pores would lead to ineffective filtration, *i.e.*, fine particles may pass through the larger pores and remain in the filtrate. Third, paper filters will readily become clogged due to the deposit of large particles on the filter, thus stopping

filtration. The Office is further reminded that the main objective of Kanebo's method is to obtain a beverage capable of being at a stable, emulsified state for a prolonged period of time. The objective is apparently achieved by the addition of emulsifying agents and stabilizers. *See* Abstract and partial translation of Kanebo. In contrast, the removal of insoluble particles of the claimed methods is achieved through a two-phase (solid-liquid) separation with a disk centrifuge, which results in more effective removal of insoluble solids, including fine particles. *See e.g.*, Specification, Table 3 on page 17. Accordingly, there is no need to add any stabilizer, such as cellulose powder, to prevent the precipitation of insoluble solids, resulting in a drink of superior taste. *See e.g.*, Specification, lines 19-25 on page 5.² The claimed methods are also unexpected over Rusoff, because the removal step allows most of cacao fat/oil remaining in the extract while eliminating fine particles. Although Rusoff's method removes fine particles, the resulting extract is actually free of fat/oil components. The claimed extract has a rich cacao flavor because of the presence of a high fat/oil content. *See e.g.*, Specification, paragraph bridging pages 13-14.³ Accordingly, the claimed methods offer unexpected advantages over both Kanebo and Rusoff.

In summary, claims 1-4 and 6-15 are non-obvious over cited references. Upon entry of the present amendment, claim 16 stands canceled, mooted the rejection. Applicants respectfully request withdrawal of the obviousness rejection and allowance of the claims.

² "The chocolate drinks thus produced not only have a smooth texture in the mouth without graininess because they are free from insoluble solids, but also have a refreshing aftertaste because they are not supplemented with any stabilizer intended for preventing precipitation."

³ "Thus, the present invention enables the production of excellent chocolate beverages characterized by: 1) having a smooth texture in the mouth because they are free from insoluble solids; 2) having a good refreshing aftertaste because they require no stabilizer; and 3) *having a rich cacao flavor because, if desired, they may have a high content of cacao nib-derived flavor- and taste-enhancing components (fat/oil components)*." (Emphasis added).

CONCLUSION

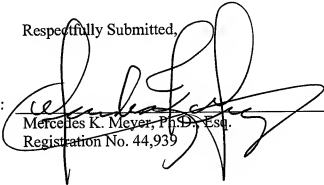
Should the Office have any questions or comments regarding Applicants' amendments or response, Applicants' undersigned representative can be contacted at (202) 842-8821. Please direct all correspondence to the below-listed address.

In the event that the Office believes that there are fees outstanding in the above-referenced matter, and for purposes of maintaining pendency of the application, the Office is authorized to charge the outstanding fees to Deposit Account No. 50-0573. The Office is likewise authorized to credit any overpayment to the same Deposit Account Number.

Respectfully Submitted,

Date: November 20, 2009

By:


Mercedes K. Meyer, Ph.D., Esq.
Registration No. 44,939

DRINKER BIDDLE & REATH LLP
Customer No. 55694
1500 K Street, N.W., Suite 1100
Washington, D.C. 20005-1209
Tel. No.: (202) 842-8800
Fax No.: (202) 842-8465